ABSTRACT

A method for moving files between network storages in a virtualized network storage system having multiple network storages and thereby rebalancing the free disk spaces therein.
It periodically judges whether to start rebalancing. Two different conditions are adopted for the determination of start: (a) there is an imbalance of free disk spaces and the minimum value of the free disk spaces is less than a threshold and (b) there is an imbalance of free disk spaces and the frequency of accesses to the system is less than a threshold. Rebalancing is carried out until the difference in free disk spaces falls below the threshold to the extend that the maximum execution time of rebalancing will not be exceeded. If a request to write into a file which is being moved from a client takes place during a file moving step, the movement of the file is aborted and the file is deleted from the destination thereof. Then, another file is selected and the file moving step is carried out again. Or, the write request from the client is abandoned and the movement of the file is continued.